

Abstract of the Disclosure

A variable-rate QAM (Quadrature Amplitude Modulation) transceiver of the present invention facilitates data interfacing between a number of bands having different transmission rates by using a number of transmitters and receivers in downstream and upstream, respectively, to provide a symmetric service in which data transmission rate in upstream is equal to that in downstream even under environment of serious channel attenuation of a signal for high frequency. That is, the variable-rate QAM transceiver of the present invention comprises a number of transmitter blocks for providing various transmission rates to the transmitters and a number of receiver blocks for providing various transmission rates to the receivers, for properly adjusting bandwidth allocation of the passband signal bandwidth of a number of transmitters and receivers to enable high speed symmetric data transmission.